Bluetooth Low Energy PAN1740 Beacon

Panasonic

Bluetooth® SMART

WIRELESS MODULES
Panasonic Electronic Devices Europe GmbH
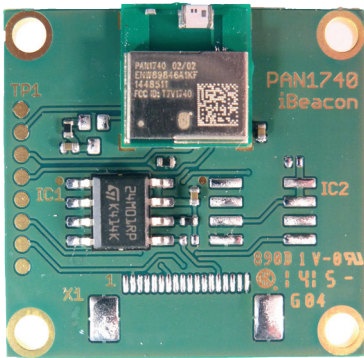
OUTLINES

A beacon device transmits a unique identification number along with a small amount of data. This mode of operation defined as: beaconing. A simple application on a receiving device, such as a smartphone, allows to obtain data and to perform various functions such as present the user with additional information on points of interest, or special promotions in a shop, or present the number of people that are in a line. Other beaconing applications are ranging or indoor positioning..

Using the PAN1740 Beacon kit allows an easy understanding and usage of beaconing without any significant development efforts. The kit is based on the proven design of the PAN1740 module, which guarantees quality as well as reliability. The PAN1740 beacon kit exhibits a significantly low power consumption of less than 5mA in TX mode. Low power consumption allows the product to run on a coin cell battery for many months.

The onboard flash memory can be used for customer application. The battery holder fits a standard CR2032 coin cell battery. A Reference design for plastic housing beaconing sample code are available upon request.
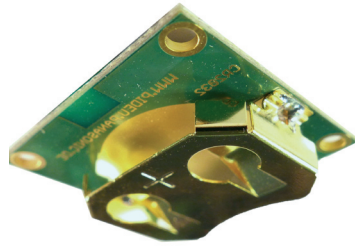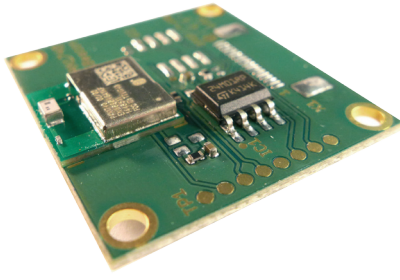
FEATURES

- Based on Dialog 14580 Bluetooth smart System-on-Chip
- ARM Cortex M0 with internal 32kB OTP
- Small size (26x24mm) with antenna
- FCC, IC and CE certified
- Battery holder for CR2032 coin cell
- Available reference design for plastic housing
- Estimated battery life of 18 months (700ms advertising interval)
- Available sample code and application note

Hardware Status: Samples

APPLICATIONS

- Bluetooth Low Energy Tags
- Indoor Positioning
- Advertising in Retail Environment
- Find me Applications
- Product Information via Bluetooth Smart
- Point of Interest
- Mobile Payment

PART NUMBER

Product	Part Number
PAN1740 Module	ENW89846A1KF
PAN1740 Beacon	ENW89849A1KF
PAN1740 Beacon Evaluation Kit	ENW89849AYKF

BLOCK DIAGRAM
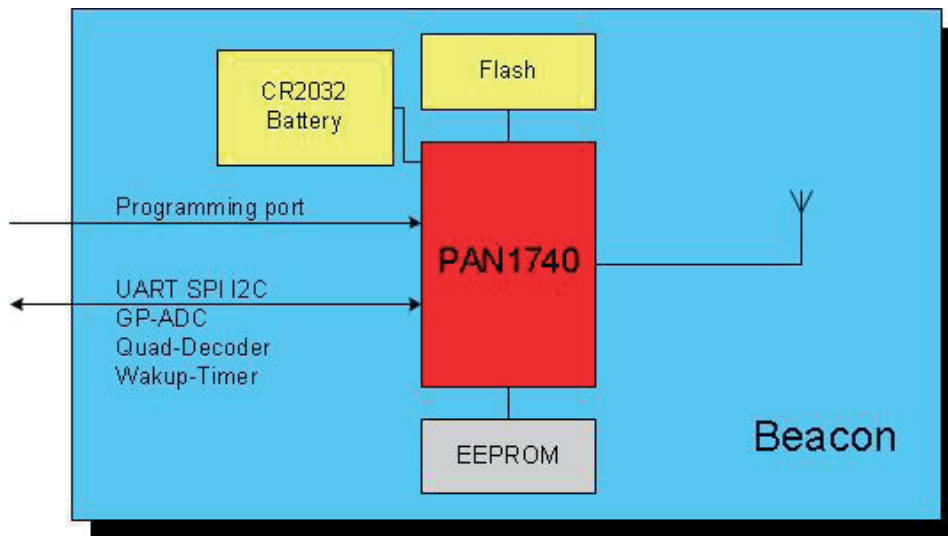
TECHNICAL CHARACTERISTICS

Parameter	Value	Condition / Note
Receiver Sensitivity	- 93 dBm	1% PER
Output Power	0 dBm	Maximum setting
Power Supply	2.35 to 3.3 V	Single operation voltage
Transmit Mode	4.9 mA	GFSK
Receive Mode	4.9 mA	GFSK
Operating Temperature Range	-40C / +85C	Industrial Range
Size	26x24 mm	

Hardware Status:
Samples